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(54) **Automatic choke for an engine**

(57) An internal combustion engine (10) includes a carburetor (34). The internal combustion engine (10) includes a choke valve (18) disposed within the carburetor (34), and a choke lever (20) interconnected with the choke valve (18) for movement with the choke valve (18). The engine (10) also includes a throttle valve (46) disposed within the carburetor (34) and a throttle lever (50) interconnected with the throttle valve (18) for movement therewith. An intermediate lever (54) is disposed between the throttle lever (50) and the choke lever (20) for movement with the choke and throttle levers (20, 50). In one embodiment, the engine (10) includes a connecting link (134) coupled between the choke and intermediate levers (20, 54), the connecting link (134) being movable with a movement of the choke lever (20) such that the movement of the choke lever (20) is translated into a movement of the intermediate lever (54).

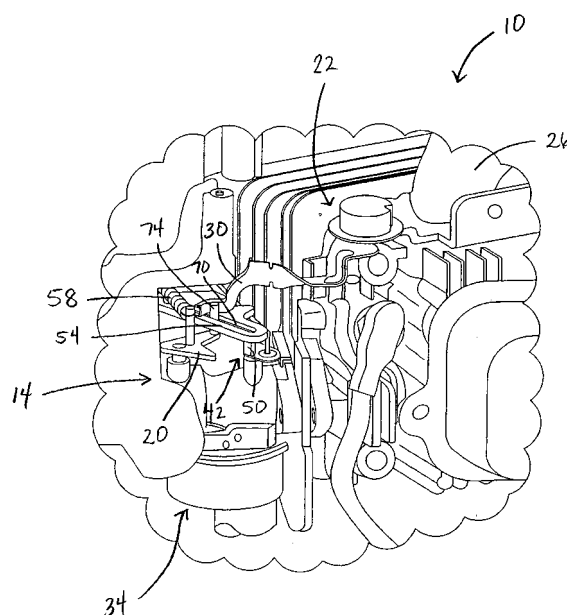


FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 05 01 8401

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 11 December 2006	Examiner Marsano, Flavio
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)



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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 11 December 2006	Examiner Marsano, Flavio
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03/82 (P04C01)



European Patent
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Application Number

EP 05 01 8401

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-15

An internal combustion engine, comprising:

- a carburetor (34);
- a choke valve (18) disposed within the carburetor (34);
- a choke lever (20) interconnected with the choke valve (18), the choke lever (20) being movable with the choke valve (18);
- a throttle valve (46) disposed within the carburetor (34);
- a throttle lever (50) interconnected with the throttle valve (46) for movement with the throttle valve (46); and
- an intermediate lever (54) disposed between the throttle lever (50) and the choke lever (20) for movement with the choke and throttle levers (20, 50), the intermediate lever (54) including a slot (70) for sliding engagement with one of the choke and throttle levers (20, 50).

2. claims: 16-31

An internal combustion engine, comprising:

- a carburetor (130);
- a choke valve (18) disposed within the carburetor (130.);
- a choke lever (20) coupled to the choke valve (18), the choke lever (20) being movable with the choke valve (18);
- a throttle valve (46) disposed within the carburetor (130);
- a throttle lever (50) coupled to the throttle valve (46) for movement with the throttle valve (46);
- an intermediate lever (134) coupled to the carburetor (130) for movement with the choke lever (20); and
- a connecting link (138) coupled between the choke lever (20) and the intermediate lever (134), the connecting link (138) being movable with a movement of the choke lever (20) such that the movement of the choke lever (20) is translated into a movement of the intermediate lever (134).

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 01 8401

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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11-12-2006

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